

**To:** Adams, Wendy[Adams.Wendy@epa.gov]; Zavala, Angie[zavala.angie@epa.gov]; Terada, Calvin[Terada.Calvin@epa.gov]; Becker, Dale[Becker.Dale@epa.gov]; Heister, Dan[Heister.Dan@epa.gov]; Rees, David[Rees.David@epa.gov]; Liverman, Earl[Liverman.Earl@epa.gov]; Garcia, Leticia[Garcia.Leticia@epa.gov]; Weigel, Greg[Weigel.Greg@epa.gov]; Fowlow, Jeffrey[Fowlow.Jeffrey@epa.gov]; Rodin, Jeffry[Rodin.Jeffry@epa.gov]; Johnson, Jennifer S.[Johnson.JenniferS@epa.gov]; Clark, Josie[Clark.Josie@epa.gov]; Parker, Kathy[Parker.Kathy@epa.gov]; Kumar, Nilesh[Kumar.Neil@epa.gov]; Leefers, Kristin[Leefers.Kristin@epa.gov]; MacDonald, Jennifer[Macdonald.Jennifer@epa.gov]; Combes, Marcia[Combes.Marcia@epa.gov]; Carr, Matt[Carr.Matthew@epa.gov]; Boykin, Michael[Boykin.Michael@epa.gov]; Sibley, Michael[Sibley.Michael@epa.gov]; Jamison, Myrna[Jamison.Myrna@epa.gov]; Knowles, Nicholas[knowles.nicholas@epa.gov]; Franklin, Richard[Franklin.Richard@epa.gov]; Whittier, Robert[Whittier.Robert@epa.gov]; Smith, Sharon[smith.sharon@epa.gov]; Stanfield, Brooks[Stanfield.Brooks@epa.gov]  
**Cc:** McLerran, Dennis[mclerran.dennis@epa.gov]; Pirzadeh, Michelle[Pirzadeh.Michelle@epa.gov]; Chu, Ed[Chu.Ed@epa.gov]; Albright, Rick[Albright.Rick@epa.gov]; Fleming, Sheila[fleming.sheila@epa.gov]; Dalrymple, Anne[Dalrymple.Anne@epa.gov]; Opalski, Dan[Opalski.Dan@epa.gov]; Stern, Allyn[Stern.Alyn@epa.gov]; Allnutt, David[Allnutt.David@epa.gov]; Kowalski, Ed[Kowalski.Edward@epa.gov]; Kelly, Kate[kelly.kate@epa.gov]  
**From:** Terada, Calvin  
**Sent:** Wed 8/19/2015 9:55:56 PM  
**Subject:** FW: Management Report for the Gold King Mine Release - 8/17 to 8/18 Operational Period  
Gold King Mine Management Report - 08.18.2015.doc

INTERNAL USE ONLY

FYSA

Calvin

---

Calvin J. Terada, Manager

Emergency Response Unit

Emergency Management Program

Office of Environmental Cleanup

U.S. Environmental Protection Agency – Region 10

1200 Sixth Avenue, Suite 900 (ECL-133)

Seattle, WA 98101

(O) (206) 553-4141

(F) (206) 553-0175

(C) (206) 790-7806

EPA Spill Line (206) 553-1263

National Response Center (800) 424-8802

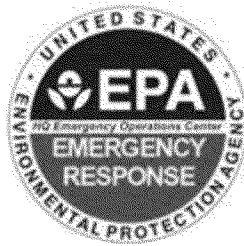
**From:** Eoc, Epahq

**Sent:** Wednesday, August 19, 2015 2:25 PM

**To:** Eoc, Epahq

**Subject:** Management Report for the Gold King Mine Release - 8/17 to 8/18 Operational Period

**This report is being sent as a bcc to prevent accidental Reply to All messages.**



For Internal Use Only

Gold King Mine Release

EPA Internal Update: August 19, 2015 1730 ET

*HQ EOC has moved to a Mon/Wed/Fri reporting cycle*

## **Situation Summary**

Overview: On August 5, a large release of mine wastewater into Cement Creek occurred while an EPA site assessment team was conducting site investigation activities. Loose material collapsed into the cave entry and pressurized water began leaking above the mine tunnel, spilling an estimated three million gallons of water stored behind the collapsed material into Cement Creek, a tributary of the Animas River. The release's path flowed through three of EPA's regions: Region 8—Colorado, Utah and the Southern Ute Tribe; Region 6--New Mexico; and, Region 9--Navajo Nation. The mine water is being treated in a series of four settling ponds constructed near the portal. Aerial reconnaissance combined with observations on the ground indicate that the plume associated with the Gold King Mine release has dissipated in downstream sections of the San Juan River and Lake Powell. New Mexico announced its determination that drinking water systems and recreational activity along the Animas and San Juan Rivers can resume based on water quality sampling results collected by both New Mexico Environment Department (NMED) and the EPA.

Public Website: A public-facing website has been created for the response: <http://www2.epa.gov/goldkingmine>. Press releases, sampling data, fact sheets and other information is being posted to this website.

-

Response Organization: EPA is integrated in Unified EPA Area Command (UEAC) in Durango, CO and in three Incident Command Posts (ICPs) in Silverton and Durango, CO and Farmington, NM. The Farmington, NM ICP is composed of two branches: one in Farmington, NM and another in Lake Powell at the Arizona and Utah Border. The Headquarters Emergency Operations Center (HQ EOC) activated to Level 1 Operations on Tuesday, August 11.

### **Unified EPA Area Command (Durango, CO)**

-

UEAC has activated for this response and will consolidate situation reports, coordinate data messaging, establish screening levels, manage the toll-free general incident hotline phone number, and coordinate finance and resource requests from the Regional ICPs to HQ EOC.

UEAC is hosting visits from Congressional members, state officials from Colorado and Utah, EPA Region 8 officials, and Navajo Nation officials. On August 16, authorization was provided for mine operations to acquire two Utility Terrain Vehicles (UTV's) to replace 4x4 vehicles as the main mode of site transportation of visitors. All visitors will be required to attend an onsite safety brief, comply with the requirements, and remain in the vehicle at all times. Visitors will also be required to wear Level D personal protection and safety (PPE) consisting of a hard hat,

safety vest, protective eyewear and safety shoes. EPA has procured 24-hour security on the road leading to the Gold King Mine to prevent unauthorized access.

National Call Center: Regions 6 and 9 are utilizing the EPA call center phone number [(844) 607-9700]. On August 17, the National Call center received 4 calls relating to Region 6 and 5 calls relating to Region 9. For the entire response, Region 6 has received a total of 54 calls and Region 9 has received a total of 21 calls.

Summary of Water/Food Deliveries by EPA Region: The table below shows the number of deliveries and quantity (in gallons) of water and food deliveries by EPA region to date:

<u>Activity</u>	<u>Region</u>	<u>As of August 17</u>		<u>Cumulative</u>	
		<u>Deliveries</u>	<u>Quantity*</u>	<u>Deliveries</u>	<u>Quantity*</u>
Potable Water Deliveries	Region 8	2	46,800	16	181,000
	Region 6	0	0	0	0
	Region 9	0**	0**	0**	0**
Livestock/Agricultural Water Deliveries	Region 8	1	500	47	141,980
	Region 6	9	53,844	59	1,104,990
	Region 9	13	208,000	53	834,000
Agricultural Food Deliveries	Region 8	0	0	0	0
	Region 6	0	0	1	244
	Region 9	0	0	1	384

\* Water quantities are reported in gallons, food quantities are reported in bales of hay.

\*\*Water deliveries in Region 9 are being handled by the Navajo Tribal Utility Authority.

Summary of Sampling by EPA Region: The table below shows the number of samples collected by EPA regions for each matrix to date:

<u>Matrix</u>	<u>Region</u>	<u>Number of Samples</u>	<u>Cumulative for</u>
		<u>on August 17</u>	<u>Response*</u>
Private Drinking Water	Region 8	26	230
	Region 6	0	170
	Region 9	0	0
Surface Water	Region 8	7	144

Region 6	9	102	
Sediment	Region 9	0	106
	Region 8	0	39
	Region 6	9	127
	Region 9	0	81

\*Compiled from the SCRIBE database, as of August 17<sup>th</sup>

### Region 8 UICP (Durango, CO)

**Highlights:** On August 18, EPA and CDPHE assessed the upper Animas River through the canyon. CDPHE plans to demobilize on August 19 and will return to the normally-scheduled watershed sampling in the area. EPA will be accepting claims at the La Plata County Fairgrounds exhibit hall on August 18 and 19. The U.S. Bureau of Reclamation (USBOR) is conducting road stabilization in and around the mine site. Heavy rains on August 16 resulted in murky water in Cement Creek and caused difficulties in the road stabilization work. The road stabilization work will continue. Region 8 intends to amend their field sampling plan to include assessment of remote areas of the canyon and develop a demobilization plan for the response.

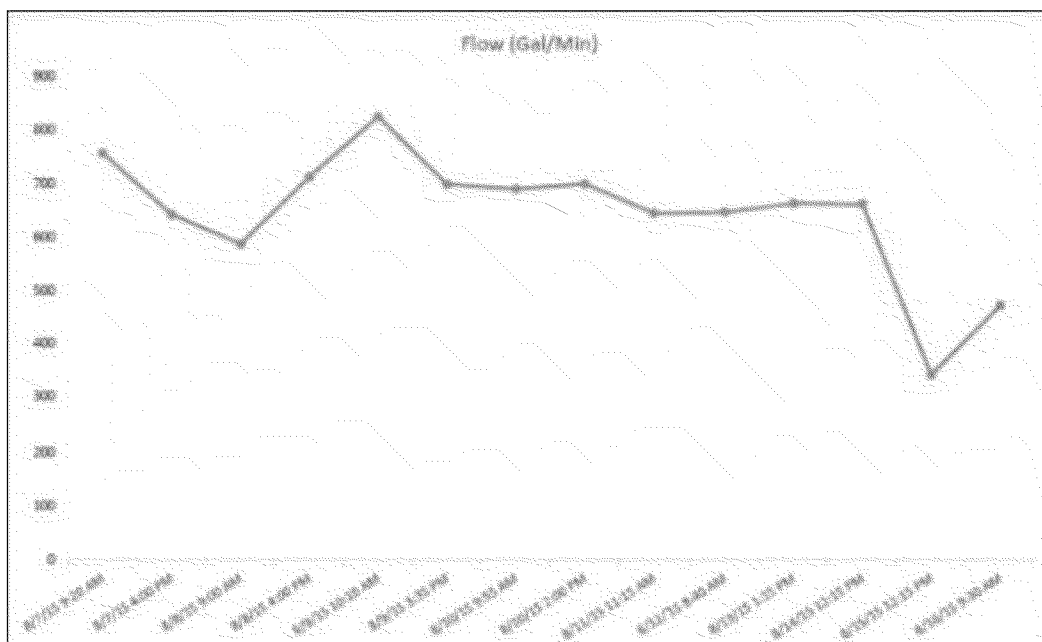
**Regional Call Center:** Region 8 maintains a general incident hotline phone number for Region 8 (970-385-8700). On August 16, the Region 8 call center received 22 calls. For the entire response, a total of 730 calls were received. Call number activity is broken down as follows:

<b>Toll-Free Number Activity</b>	<b>As of August 17</b>	<b>Total to Date</b>
Well Water Test Scheduling	13	345
Water Concerns	2	101
Health Concerns	0	31
Recreation	1	21
Ecological Concerns	2	19
Livestock/Irrigation	2	19
Tourism/Media	1	53
Volunteer Offers	1	22
General Concerns	0	119
<b>TOTAL</b>	<b>22</b>	<b>730</b>

**Drinking Water Sampling:** The City of Durango in coordination with CDPHE has resumed pumping water from the Animas River for their water treatment plant. Out of 105 groundwater wells sampled, only seven (7) wells exceeded Maximum Contaminant Levels (MCLs) for lead and arsenic. However, these samples were taken from the well head prior to going through the

home treatment systems. EPA Region 8 will be conducting well water sampling as needed and calling those residents sampled to provide them analytical results. For residents that had well samples exceeding drinking water standards in the wells, those wells will be flushed and then resampled at both the tap and at the well.

Surface Water & Sediment Sampling: EPA Region 8 continues to operate four treatment and sedimentation ponds at the mine site which are treating water by lowering acidity levels and removing dissolved metals. Treated water from the last treatment pond is discharging into Cement Creek. Water quality data is being collected at the influent and effluent of the treatment system. Flow data out of the mine is being collected manually two times per day. Flow from the mine through the morning of August 16 is shown in the following chart:



Irrigation Ditch Sampling: Irrigation ditches drawing from the Animas River in Colorado are now open and available for use. Ditch and property assessments will continue with focus on whether any mitigation of private properties needs to be completed.

### **Region 6 UICP (New Mexico Command, Farmington, NM)**

Highlights: At the August 17 community meeting, community members were very interested in EPA's presentation on sample results. It is anticipated that this will be the last community meeting held by EPA.

Drinking Water Sampling: Private well sampling is ongoing. Water delivery is not expected to significantly reduce the need for additional water supply, so the towns of Morningstar and Farmington are completing a connection between their water systems to fulfill the additional need for Morningstar. Morningstar and Farmington have tested the completed connection. The pump is working but the pipe has separated in one section. System operators are currently working to repair the leak.

Surface Water & Sediment Sampling: EPA continues to collect water quality samples from nine (9) locations in the river near intakes for Aztec, Farmington, Lower Valley Water Users Association, Morning Star Water Supply System and the North Star Water User Association. UEAC and HQ were sent surface water sample data from public water supply intakes for August 12 and sediment sample data from public water supply intakes for August 10-13.

Irrigation Ditch Sampling: The irrigation ditch sampling effort has been completed. UEAC and HQ were sent irrigation ditch sediment sample data from August 13.

Agriculture/Livestock: Irrigation ditches along the Animas River have returned to normal irrigation and livestock watering operations. EPA has delivered 1,068,270 gallons of water for irrigation and 36,720 gallons of water for livestock watering.

## **Region 9 UICP (Navajo Command, Farmington, NM)**

Highlights: EPA Region 9 is focused on assessing the impacts of the release along a stretch of the San Juan River extending from Farmington, NM, to Mexican Hat, UT, and into Lake Powell. EPA Region 9 continues to coordinate with representatives from the Navajo Nation, Bureau of Indian Affairs (BIA), the states of Arizona, Utah, New Mexico, and federal agencies Bureau of Reclamation, the National Park Service, and US Geological Survey.

Drinking Water Sampling: At the request of the City of Page, Arizona, EPA and START contractors sampled the drinking water intake in Lake Powell on August 17. Due to the highly variable conditions typical of this segment of the river, additional testing will be conducted.

Surface Water & Sediment Sampling: EPA has completed sampling at Lake Powell on August 18 but continues to sample 11 locations in the San Juan River.

Agriculture/Livestock: The State of Utah lifted their advisories for Utah Crop Irrigation and Livestock Watering. The Navajo Tribal Utility Authority (NTUA) is working on putting their water distribution lines back online so that delivery of water can be discontinued. To date, EPA has provided 418,000 gallons agricultural water to impacted areas and approximately 400 bales of hay to date. Community meetings continue in Chapters in the San Juan River corridor.

Public Information/Community Outreach: EPA Region 9 Community Involvement Coordinators (CICs) continue to provide public outreach and communication across the Navajo Nation. EPA continues coordinating field response efforts with Navajo Nation through an EPA representative in Window Rock, AZ. In addition:

- The Navajo Nation President's office held a meeting with Navajo EPA on Monday August 17 to discuss neighboring states lifting of water advisories. The President decided this morning to keep river restrictions in place today. He will reconsider daily depending on data and recommendations from Navajo EPA.
- On August 16 meetings were held at the Mexican Water Chapter (25 in attendance) and the Guudiah Chapter (40 in attendance). Meetings will resume on August 18 at the Beclabito Chapter.
- Congressman Rob Bishop (and Chair of the House Natural Resources Committee) visited the Glen Canyon National Recreation Area on August 17.
- Senator Feinstein (D-CA) has expressed an interest in obtaining the data and maps of the sampling being done by EPA on Navajo Nation.
- The Attorneys General of Utah and Colorado are visiting the Gold King Mine site on August 19.

### **EPA Headquarters**

The HQ EOC has been activated at Level 1 for this incident. HQ EOC tasks include:

- coordination of regional staffing and funding needs;
- coordination among its regions, laboratories and national program offices in Washington DC;
- participation in data calls to assist with interpretation of water and sediment data;
- exploration of various authorities and funding sources that might be available to the Agency in responding to this incident; and

On August 19, EPA HQ convened a conference call on long-term watershed planning with the affected states and Indian Nations as well as EPA HQ, UEAC, and the individual EPA regions. Conversations covered current status of sampling efforts, availability of historical water quality data, and brainstorming on possible coordinated plans for long-term monitoring.

-



HQ EOC EU and ORD: The EU is coordinating a daily release of data results with UEAC. The EU has been working with the EOC Manager, the EOC PIO and the regions on an agreed-upon template for data submission to HQ for review and posting, as well as text and a flow chart for describing the process of data flow from the regions to HQ EOC. Sediment sample data was reviewed and approved for Region 6 on August 18. An EU call between HQ and regions on August 18 indicates that private well water samples have been collected and analyzed. Regions may be contacting OGC to determine whether it is appropriate to evaluate results against drinking water MCLs or other screening levels. HQ ORD continues to participate in a watershed management calls to discuss long-term planning strategy for recovery and helped with reviewing Region 9 surface water sampling data and Region 8 and Region 6 sampling plans.

HQ EOC Water: The EOC Water desk is coordinating watershed information for the Animas River region to establish baseline watershed conditions. The Water desk has also tracked down the source of an EPA widely-cited statistic that “40% of all western headwaters are polluted with hardrock mining waste.” The quote can be found in “The Animas River Watershed, San Juan County, Colorado”:  
[http://pubs.usgs.gov/pp/1651/downloads/Vol1\\_combinedChapters/vol1\\_chapB.pdf](http://pubs.usgs.gov/pp/1651/downloads/Vol1_combinedChapters/vol1_chapB.pdf). Both the introduction and page 10 cite the 40% statistic.

HQ EOC OGC: EOC OGC provided a Q&A document on the claims process which is now posted to the EPA public-facing website. In addition, an Information Law expert from OGC provided a briefing to the HQ EOC on August 17 about document preservation for both FOIA and Litigation Hold purposes.

-

HQ EOC PIO: EPA issued ten press releases and updates regarding the Gold King Mine Release incident, on August 8 and August 11-18. The PIO has received over 150 press inquiries. In addition, the PIO is/has:

- Set up a call with JIC to assign appropriate EPA representatives for interviews with media (on-camera, radio) and discuss protocols for dealing with multiple on-camera and radio media requests from Al Jazeera News and local press outlets from the Durango area and Navajo Nation Reservation region.
- Coordinating with EOC, JIC, PAD and OPA personnel on drafting responses to a series of questions from the Wall Street Journal pertaining to Gold King Mine spill clean-up efforts and site designation.
- EOC PIO has finalized or is in the process of finalizing the following materials for pending posting and distribution:
  - Bureau of Indian Affairs/Navajo Nation Livestock Water Locations Factsheet
  - Topline talking points for press interviews and senior officials (in process)
  - Claims FAQ

- Agriculture/livestock water and irrigation notification materials (in process)
- Region 6 irrigation ditch data
- Region 6 sediment data (in process)
- Region 9 surface water sampling data (in process)
- EOC PIO also worked with OGC, OW and Office of Web Communications to approve 13 Gold King Mine-centric tweets and Facebook posts that will be used throughout the week of August 17.

<b>Social Media Source</b>	<b>Total</b>
Twitter	43 tweets
Facebook	22 posts
Flickr	13 photos
Instagram	3 posts
Pinterest	1 pin board with 13 pinned photos

-

HQ EOC ATSDR: The EOC ATSDR desk continues to support the EU in evaluating incoming sampling data and the PIO in crafting appropriate health messaging. EPA Region 8 is coordinating with ATSDR in response to public health concerns/questions associated with the mine waste plume. ATSDR has been in communication with local health officials at San Juan Basin Health Department and San Juan County Public Health in Colorado.

HQ EOC Finance: The EOC Finance desk has conducted the following activities:

- issued \$1 million to Region 8 in support of the response;
- sent Pay Cap Waiver memorandum to management for approval;
- compiled personnel list to be submitted to finance service centers;
- tracked overtime utilization and projection cost estimate;
- continued to provide agency support with account favorites set-up in Peoples Plus; and
- responded to payroll and account issues as received from HQ and regional staff.

-

HQ OSRTI Technical Specialist: The EOC OSRTI Mining Technical Specialist desk continues to support the HQ EOC PIO on media inquiries and technical questions.

-

Other HQ activities: The Environmental Response Team (ERT) are continuing to provide support on the response.

**NUMBER OF PERSONNEL INVOLVED:**

	<b>EPA Personnel</b>	<b>EPA Contractors</b>	<b>Coast Guard Personnel</b>	<b>Other Federal, State, Local and Tribal Entities</b>	<b>Total</b>
Area Command	15	3	3	0	<b>21</b>
Region 8	47	34	3	68	<b>152</b>
Region 6	28	30	0	0	<b>58</b>
Region 9	8	18	8	2	<b>36</b>
HQ EOC	29	4	0	0	<b>33</b>
<b>Total</b>	<b>127</b>	<b>89</b>	<b>14</b>	<b>70</b>	<b>300</b>

**\*HQ EOC numbers reflect personnel supporting the response during the current operational period. Regional numbers reflect personnel responding to the incident on August 17, 2015.**

**FINANCE:**

<b>Region</b>	<b><u>Estimated Response Support Costs as of August 18</u></b>				<b>Total Cumulative Costs Expended</b>
	<b>EPA Cumulative Expended Payroll</b>	<b>EPA Cumulative Expended Travel</b>	<b>EPA Cumulative Other Charges</b>	<b>Cumulative Contract Costs</b>	
Region 8	\$610,267	\$60,073	\$0	\$679,284	\$1,349,625
Region 6	\$244,800	\$28,750	\$68,855	\$989,568	\$1,331,972
Region 9	\$211,200	\$24,000	\$0	\$396,888	\$632,088
<b>TOTAL</b>	<b>\$1,066,267</b>	<b>\$112,823</b>	<b>\$68,855</b>	<b>\$2,065,740</b>	<b>3,313,685</b>

<b><u>Estimated Burn Rates as of August 18</u></b>	
<b>Region</b>	<b><u>Estimated Daily Burn Rate</u></b>
Region 8	\$134,962
Region 6	\$110,998
Region 9	\$57,463
<b>TOTAL</b>	<b>\$303,423</b>

Nancy Abrams, Watch Officer

U.S. Environmental Protection Agency  
Headquarters Emergency Operations Center  
1200 Pennsylvania Ave  
Washington, DC 20004  
202-564-3850  
<mailto:eoc.epahq@epa.gov>